

REMARKS

By the above amendment, claims 5 - 13 which stand withdrawn from consideration as being directed to a non-elected invention have been canceled without prejudice or disclaimer of the subject matter thereof and without prejudice to the right to file a divisional application directed thereto. Furthermore, independent claims 1 and 14 have been amended to clarify features thereof and to more particularly, recite features of the multitrack write head and the multitrack read head, as previously recited in claims 9 and 12, with newly added dependent claims 15 - 25 reciting features of the claims previously dependent upon claims 9 and 12, for example. Thus, it is apparent that the recited features have proper basis in the application, as originally filed.

As to the rejection of claims 1, 3 and 14 under 35 USC 102(b) as being anticipated by Usui (US Patent No. 6,172,831 B1) and the rejection of claims 2 and 4 under 35 USC 103(a) as being unpatentable over Usui (US Patent No. 6,172,831 B1) in view of Saito (US Patent No. 5,412,520), such rejections are traversed insofar as they are applicable to the present claims and reconsideration and withdrawal of the rejections are respectfully requested.

As to the requirements to support a rejection under 35 USC 102, reference is made to the decision of In re Robertson, 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. As noted by the court, if the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if the element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing

descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Moreover, the court pointed out that inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

As to the requirements to support a rejection under 35 USC 103, As to the requirements to support a rejection under 35 USC 103, reference is made to the decision of In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988), wherein the court pointed out that the PTO has the burden under '103 to establish a prima facie case of obviousness and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. As noted by the court, whether a particular combination might be "obvious to try" is not a legitimate test of patentability and obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. As further noted by the court, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

In accordance with the present invention, as now recited in both independent claims 1 and 14, a magnetic recording reproducing apparatus of a helical scanning system capable of writing or reading signals simultaneously to or from a plurality of tracks while winding a magnetic tape to a rotary drum diagonally, is provided. The apparatus includes at least one multitrack write head having N write elements arranged on the rotary drum along a track width direction in an integral fashion and at least one multitrack read head having read elements arranged along the track

width direction in an integral fashion formed on the rotary drum, wherein the number of read elements is either an integral multiple of N (claim 1) or is L where L is an integer equal to more than N (claim 14). The multitrack write head writes signals to a group of N signal tracks aligned parallel on the magnetic tape during one rotation of the rotary drum and the multitrack read head reads the group of N signal tracks by use of any one of the read elements.

As now recited in each of independent claims 1 and 14, the multitrack write head is a multitrack thin film magnetic head which comprises plural magnetic write elements formed on a substrate, wherein an n-th thin film magnetic write element and an (n+1)-th thin film magnetic write element are formed on the substrate with a predetermined shift in a track width direction being provided therebetween, and the n-th and (n+1)-th magnetic write elements have a structure so that a protection film extending along the direction of film deposition is formed therebetween. The magnetic multitrack read head comprises plural magnetic read elements formed on a substrate, wherein the magnetic read elements are magnetoresistive effect elements and an n-th thin film magnetic read element and an (n+1)-th thin film magnetic read element are formed on the substrate with a predetermined distance extending in a track width direction being provided therebetween. With this structural arrangement, the relationship between neighboring or adjacent write heads in each multitrack magnetic write head and the relationship between neighboring or adjacent read heads in each multitrack magnetic read head can be maintained with high accuracy and the width of the track and the track pitch formed on the magnetic tape can be narrowed, whereby signal recording or writing density on the track can be increased, as described in the specification of this application. Applicants submit that these features as recited in the independent claims 1 and 14, as amended, and

the dependent claims are not disclosed or taught in the cited art as will become clear from the following discussion.

Irrespective of the position set forth by the Examiner concerning write heads and read heads in Usui, applicants submit there is no disclosure or teaching of the structural arrangement of adjacent or neighboring n-th and (n+1)-th write heads in the multitrack write head, as recited in claims 1 and 14 nor a disclosure or teaching of the structural relationship between adjacent or neighboring n-th and (n+1)-th read heads, as recited in the independent claims 1 and 14 of this application. Thus, it is apparent that independent claims 1 and 14, as amended, patentably distinguish over Usui in the sense of 35 USC 102 and should be considered allowable thereover.

As to any suggestion by the Examiner that it would be obvious from the teachings of Usui to provide the recited features, applicants submit that there is no disclosure or teaching of the recited structural features and it cannot be considered obvious in the sense of 35 USC 103 to provide such features. Accordingly, applicants submit that independent claims 1 and 14 patentably distinguish over Usui in the sense of 35 USC 103 such that all claims should be considered allowable thereover.

As to claim 3, this claim which depends from claim 1 recites further features of the present invention, and applicants submit that since Usui does not disclose or teach the recited features of claim 1, it is apparent that the features of dependent claim 3 when considered with claim 1 also are not disclosed or taught by Usui and claim 3 should be considered to patentably distinguish thereover. However, with respect to the Examiner's position that "the azimuth angles of the write elements of the multitrack write head and the read elements of the multitrack write head and the read elements of the multitrack read head are set to an identical value, referring to

Figures 2A and 2B of Usui, applicants submit there is no disclosure in Usui of azimuth angles or the claimed features. Furthermore, applicants submit that the illustration of Figs. 2A and 2B of Usui do not illustrate identical azimuth angles, for the write elements and the read elements as recited in claim 3, and irrespective of the Examiner's contentions concerning the other features of claim 3, applicants submit that hereagain, such features are not disclosed in Usui in the sense of 35 USC 103. Thus, applicants submit that claim 3 also patentably distinguishes over Usui in the sense of 35 USC 102 and 35 USC 103.

As to the combination of Usui with Saito with respect to the features of claims 2 and 4, hereagain, applicants note that Usui does not disclose or teach the features of independent claim 1, and applicants submit that irrespective of the disclosure and teaching of Saito, the combination with Usui does not overcome the deficiencies of Usui as pointed out above. Thus, claims 2 and 4 also patentably distinguish over this proposed combination of references in the sense of 35 USC 103.

With respect to the newly added dependent claims 15 - 25 which depend from independent claim 1 or independent claim 14, applicants submit that these claims recite further features not disclosed or taught by Usui taken alone or in combination with other cited art in the sense of 35 USC 103. As such, applicants submit that the newly added dependent claims further patentably distinguish over the cited art and should be considered allowable thereover.

In view of the above amendments and remarks, applicants submit that all claims present in this application should now be in condition for allowance and issuance of an action of favorable nature is courteously solicited.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 520.43000X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



Melvin Kraus
Registration No. 22,466

MK/jla
(703) 312-6600